UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

G.I. SPORTZ, INC. and GI SPORTZ DIRECT, LLC,	1:17-cv-05590-NLH-KMW
Plaintiffs,	**MARKMAN OPINION**
v.	
VALKEN, INC.,	
Defendant.	

APPEARANCES:

RYAN W. O'DONNELL
VOLPE & KOENIG, P.C.
UNITED PLAZA
SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

On behalf of Plaintiffs

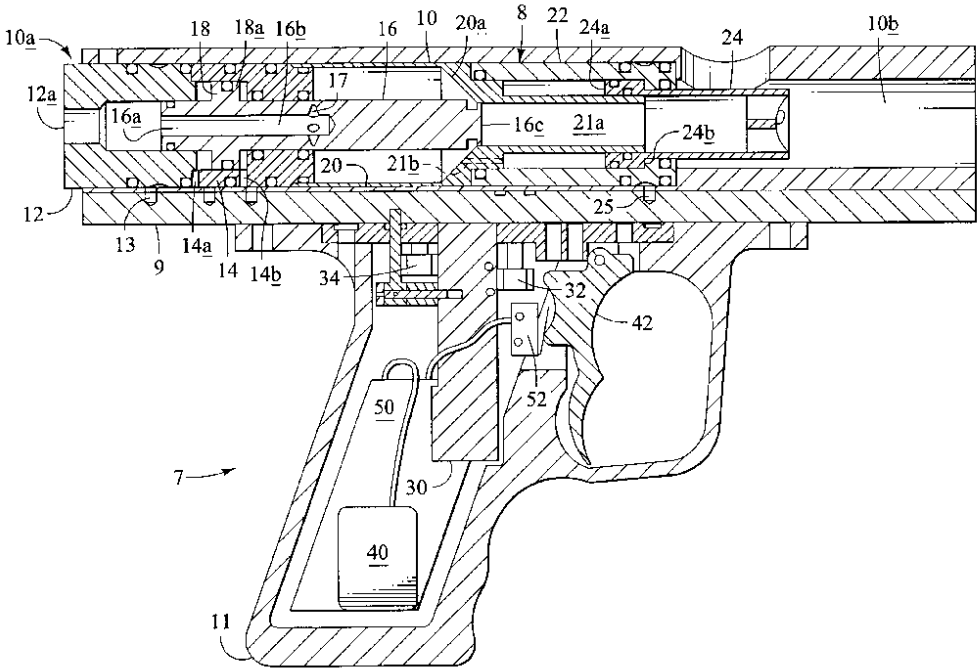
ANTHONY J. DIMARINO, III
EMMETT STEPHAN COLLAZO
A.J. DIMARINO, III, PC
41 GROVE STREET
HADDONFIELD, NJ 08033

On behalf of Defendant

HILLMAN, District Judge

Plaintiffs, G.I. Sportz Inc. and G.I. Sportz Direct LLC, own by assignment two patents for pneumatic assemblies for recreational compressed gas operated paintball guns: U.S. Patent No. 6,644,295 (the "'295 Patent"), titled "Pneumatic Assembly for a Paintball Gun," issued on November 11, 2003, by

the United States Patent and Trademark Office ("USPTO"), and U.S. Patent No. 6,901,923 (the "'923 Patent"), titled "Pneumatic Assembly for a Paintball Gun," issued by the USPTO on June 7, 2005.



(Docket No. 1-1 at 2; Docket No. 1-2 at 2.)

Plaintiffs claim that Defendant, Valken, Inc., with full knowledge of the two Patents, is making, using, selling, and offering to sell pneumatic assemblies for recreational compressed gas operated guns that are covered by one or more claims of the two Patents, including but not limited to the V12 Valken Airsoft Engine ("V12 Engine") and compressed gas guns

using the V12 Engine.[1] Defendant explains that the Valken V12 device is used in the competitive team sport of airsoft, and it disputes infringement because, among other reasons, its products are not pneumatic: Defendant uses springs but the Patents require air pressure forces, and Defendant's products do not conform to the numerous "chamber" and "housing" configurations required in the two Patents.[2]

The parties dispute whether the preamble and nine terms in the Patents needs to be construed by the Court or given their plain and ordinary meaning, and the parties differ on the construction of four terms.[3] A claim construction hearing was held on March 6, 2019. This Opinion memorializes the Court's findings as to its construction of claims at issue pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996).

I. LAW OF CLAIM CONSTRUCTION

The ultimate question of the proper construction of a claim in a patent is a question of law for the court to determine.

---

[1] This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331, 1338, and 35 U.S.C. § 101 et seq.

[2] Defendant also states that its accused devices are airsoft products that enthusiasts use to make airsoft guns, which shoot small, hard pellets, and not paintballs.

[3] 21 terms are at issue. The parties have agreed on the construction of 7 terms. This Opinion addresses the remaining 14 terms.

Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 837 (2015) (citing Markman v. Westview Instruments, Inc., 517 U.S. 370, 388-91 (1996)) (further explaining, "While we held in Markman that the ultimate issue of the proper construction of a claim should be treated as a question of law, we also recognized that in patent construction, subsidiary factfinding is sometimes necessary."). A patent claim is that "'portion of the patent document that defines the scope of the patentee's rights.'" Id. (quoting Markman, 517 U.S. at 372).

The Federal Circuit has set forth a "familiar approach to claim construction." In re Papst Licensing Digital Camera Patent Litigation, 778 F.3d 1255, 1261 (Fed. Cir. 2015). In construing a patent claim, which should be considered in the mindset of a person having ordinary skill in the art ("POSA"):

> (1) a court should give words of a claim their ordinary meaning in the context of the claim and the whole patent document;
>
> (2) the specification particularly, but also the prosecution history, informs the determination of claim meaning in context, including by resolving ambiguities;
>
> (3) even if the meaning is plain on the face of the claim language, the patentee can, by acting with sufficient clarity, disclaim such a plain meaning or prescribe a special definition; and

(4) the court should apply the principle that "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." In re Papst, 778 F.3d at 1261.

II. DISPUTED TERMS

The Court has thoroughly considered the parties' positions on their proposed construction of the disputed terms[4] as

[4] As noted above, the parties have agreed to the construction of seven terms at issue. They are as follows:

Claim Term	Agreed to Construction
"**valve**" *'923 Patent*: claims 1, 2, 4, 5	The parties agree that the claim term "valve" in claims 1, 2, 4, and 5 of the '923 Patent refers to a "firing valve" and should have the same construction as "firing valve."
"**pneumatic assembly**" *'295 Patent*: claims 1, 2, 4, 8 *'923 Patent*: claims 1-5	A group of parts operable by air or gas under pressure.
"**firing valve**" *'295 Patent*: claims 1, 2, 4, 8	Valve that is moveable between open and closed positions to release compressed gas.
"**bolt**" *'295 Patent*: claims 1, 2, 4 *'923 Patent*: claims 1, 2, 4, 5	A structure having a gas passageway therethrough that is configured to move in a rearward direction to load a projectile and in a forward direction to position the projectile for firing.
"**electro-pneumatic valve**" *'295 Patent*: claims 1, 2, 4, 8	Electronically actuated valve which controls compressed gas or air.
"**valve retainer**" *'923 Patent*: claim 5	A structure that holds the valve in place.
"**bolt cylinder**" *'923 Patent*: claim 5	A cylindrical area housing the bolt.

presented in their comprehensive briefs and at oral argument at the Markman hearing. The Court finds the following:

1. **Whether the term "paintball gun" in the preamble requires construction**

Claim Term	G.I. Sportz Construction	Valken Construction
The term "paintball gun" in the preamble	Plain and ordinary meaning	an "air cannon for deploying paintballs"

Court's construction: "paintball gun" - "a device for deploying a paintball"

Plaintiffs argue that because a structurally complete invention is described in the body of the claims of the '295 and '923 Patents and the term "paintball gun" does not give life, meaning, or vitality to the claims, the term "paintball gun" is not a limitation and does not need to be construed. Plaintiffs further argue that the term "paintball gun" as it appears in the claims of the '295 and '923 Patent merely describes the "use or purpose" of the invention, and the term "paintball gun" is not essential to understanding limitations or terms in the claim body.

Defendant contends that Plaintiffs' argument concerns whether "paintball gun" is an element that must be met for an infringement determination – i.e., whether "paintball gun" in the preamble is a limitation – and not an actual dispute over the term's construction. Defendant argues that the term should

be first construed and then the issue of whether it is a limitation assessed.

From the Court's review of the Patents, it is evident that meaning of the term "paintball gun" must be construed before it can be determined, as Plaintiffs argue, that the term is not a limitation. Both Patents are titled "Pneumatic Assembly for a Paintball Gun," and both Patents refer to "paintball gun" numerous times. For example, the '295 Patent provides:

SUMMARY OF THE INVENTION

> One aspect of the present invention is to provide an in-line pneumatic assembly capable of providing the primary operating components of a paintball gun in a single chamber of the paintball gun.
>
> Another aspect of the present invention is to provide a paintball gun that is smaller and lighter than conventional markers.
>
> Yet another aspect of the present invention is to provide a paintball gun that has a smaller profile than conventional paintball guns.
>
> Still another aspect of this invention is to enable a paintball gun having reduced size and weight that fires from a closed-bolt position.

(Docket No. 1-1 at 8.)

The '923 Patent provides:

BACKGROUND OF THE INVENTION

> This invention relates generally to pneumatic launching devices. More specifically, however, this invention relates primarily to pneumatic paintball guns (or "markers") for use in the sport of paintball.
>
> In the sport of paintball, it is generally desirable

> to have a gun that is as light and maneuverable as possible. Players need increased mobility to move from bunker to bunker quickly to avoid being hit. Furthermore, in the sport of paintball, the marker is treated as an extension of the body such that a hit to the marker counts as a hit to the player. It is desirable, therefore, to have a paintball gun with as small a profile as possible.

(Docket No. 1-2 at 8.)

The claims for '295 Patent all begin with "An electro-pneumatic paintball gun . . . . " (Docket No. 1-1 at 10-11.) The claims for the '923 Patent all begin with "An in-line pneumatic assembly for a paintball gun . . . ." (Docket No. 1-2 at 10-11.)

Thus, "paintball gun" must be construed because it is included in every claim, and it appears that the term may indeed be essential to understanding limitations or terms in the claim body. If the Court or other factfinder were to find that "paintball gun" was essential to that understanding, a construction of that term would be necessary to construe other parts of the Patents.[5] See O2 Micro Intern. Ltd. v. Beyond

[5] Plaintiffs argue that the term paintball gun could be deleted or substituted for the term "apparatus" or "device" without affecting the meaning of the claim. (Docket No. 56 at 17.) The Court questions this position, as the names of the Patents would then be "Pneumatic assembly for an apparatus" or "Pneumatic assembly for a device," and concern a generic apparatus or device, rather than the specific purpose of the Patents for the claimed "electro-pneumatic paintball gun" and "in-line pneumatic assembly for a paintball gun." This observation demonstrates why the term "paintball gun" requires a construction prior to the substantive analysis of Plaintiffs' infringement claims.

Innovation Technology Co., Ltd., 521 F.3d 1351, 1361 (Fed. Cir. 2008) ("A determination that a claim term 'needs no construction' or has the 'plain and ordinary meaning' may be inadequate when a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute."); ICU Medical, Inc. v. Alaris Medical Systems, Inc., 558 F.3d 1368, 1375–76 (Fed. Cir. 2009) (quoting Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005)) ("'[It is] entirely proper to consider the functions of an invention in seeking to determine the meaning of particular claim language.'"); Medrad, 401 F.3d at 1319 (citations omitted) ("We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.").

Defendant's construction that "paintball gun" is an "air cannon for deploying paintballs" interjects a limiting descriptor – "air cannon" – not present in the preamble or the claims of either Patent. The issue of Plaintiffs focusing on a limitation is the very argument Defendant advances as why the term must be construed over Plaintiffs' objections. The Court agrees that the claim must be construed, but the Court does not accept Defendant's construction. The Court finds that the term

"paintball gun" simply means "a device for deploying a paintball."[6]

2. "Housing," "Substantially Contiguous Assembly Housing," "Gas Storage Area Housing"

Claim Term	G.I. Sportz Construction	Valken Construction
"housing" '295 Pat.: claims 1, 2, 4, 8	Plain and ordinary meaning	"body containing pneumatic assembly elements"

Claim Term	G.I. Sportz Construction	Valken Construction
"substantially contiguous assembly housing" '295 Pat.: claim 8 '923 Pat.: claim 5	Plain and ordinary meaning	"body that includes pneumatic assembly components fitted end to end"

Claim Term	G.I. Sportz Construction	Valken Construction
"gas storage area housing" '923 Pat.: claim 5	Plain and ordinary meaning	"container separate from housing that holds compressed gas"

Court's construction:

"housing" - "a body containing [certain components]"

"substantially contiguous assembly housing" – "a body containing components that are connected together in-line"

"gas storage area housing" - "a body containing the gas storage area"

[6] The Patents also refer to "paintball gun" as a "marker." The Court finds these terms to be synonymous.

Plaintiffs argue that “housing” is a commonplace word that does not need a special construction, and the plain and ordinary meaning of this term should be adopted by the Court. Plaintiffs argue that Defendant’s proposal includes arbitrary word replacements, adds unnecessary limitations, is inconsistent with its proposed construction of other claim terms that include the word “housing,” and it adds confusion. Plaintiffs also argue that because the claims clearly recite that the “pneumatic assembly components” are within the “chamber,” Defendant’s construction of “housing” is unnecessary.

Defendant argues that its construction should be accepted because, one, Plaintiffs do not provide any construction, and two, “housing” has different meanings within the ’295 Patent.

The Court finds that all three terms must be construed. First, the Court concludes a construction of the term “housing” is required because of the several variations of the term in the ’295 Patent. Claims 1 through 7 all provide in relevant part:

> 1. An electro-pneumatic paintball gun comprising:
>
> a housing;
> a chamber located within said housing;
> a pneumatic assembly disposed within said chamber, said pneumatic assembly comprising a firing valve, a compressed gas storage area, and a bolt . . . .

(Docket No. 1-1 at 10-11.)

Claim 8 is different and provides in relevant part:

> 8. An electro-pneumatic paintball gun comprising:

> a substantially longitudinally arranged chamber disposed through a housing of said paintball gun from a rearward end to a breech end;
> an in-line pneumatic assembly located within said chamber, said in-line pneumatic assembly comprising a firing valve, a compressed gas storage chamber, and a bolt assembly arranged together in a substantially contiguous assembly housing . . . .

(Id. at 11.)

The ’923 Patent also contains the term “housing” in two configurations:

> 5. An in-line pneumatic assembly according to claim 1, wherein the gas storage area is arranged in a gas storage area housing, wherein the valve is slidably retained in a valve retainer, wherein the bolt is slidably mounted in a bolt cylinder, and wherein the valve retainer, the gas storage area housing, and the bolt cylinder are connected together end to end to form a substantially contiguous assembly housing.

(Docket No. 1-2 at 10.)

In order to differentiate between “housing,” “substantially contiguous assembly housing,” and “gas storage area housing,” those terms must be defined first as to the broad term “housing” and then with more specificity as to the other two types of housing. The Patents provide “body” as a synonym to “housing.” (Docket No. 1-1 at 8 (“According to another embodiment, a paintball gun preferably includes a body having a breech.”); 1-2 at 9 (“a paintball gun constructed according to another aspect of this invention includes a housing (or body)”.) The Court therefore finds that “housing” means “body containing [certain

components],” which components are then further defined by the claim.

The definition of “housing” further helps to define the other two terms in the context of the particular claim. Thus, a “gas storage area housing” is “a body containing the gas storage area.” A “substantially contiguous assembly housing” is a “body containing components that are connected together in-line.”

3. “Disposed,” “Configured to be disposed in a closed position,” “Chamber,” “ A single longitudinally disposed chamber”

Claim Term	G.I. Sportz Construction	Valken Construction
“disposed” ’295 Pat.: claims 1, 2, 4, 8	Plain and ordinary meaning If a construction other than “plain and ordinary meaning” is required, then Plaintiffs propose the following construction: “arranged”	“located”
Claim Term	**G.I. Sportz Construction**	**Valken Construction**
“chamber” ’295 Pat.: claims 1, 2, 4, 8 ’923 Pat.: claim 3	“a longitudinally arranged area within a housing”	“a container of air or pneumatic assembly components”
Claim Term	**G.I. Sportz Construction**	**Valken Construction**
“configured to be disposed in a closed position” ’295 Pat.: claim 1	Plain and ordinary meaning	“designed to be located, biased, or urged to a forward position”

Claim Term	G.I. Sportz Construction	Valken Construction
"a single longitudinally disposed chamber" '923 Pat.: 3	"a longitudinally arranged area within a housing"	"one container with component parts located in series, end to end"

Court's construction:

"Disposed" - "arranged"

"Chamber" – "compartment"

"Configured to be disposed in a closed position" – "arranged in a closed position"

"A single longitudinally disposed chamber" – "one longitudinally arranged container"

The Court will construe these four terms together in sequence. For "disposed," Plaintiffs point out that the term "disposed" appears in the '295 Patent claims in three ways: (1) "disposed in" (claim 1); (2) "disposed within" (claims 1, 2, 4); "disposed through" (claim 8), and Plaintiffs argue that in each instance, the term "disposed" is used in accordance with its plain and ordinary meaning. Plaintiffs argue that there is no reason to depart from this language, but if the Court was compelled to define this claim term, it should adopt the term "arranged" as this is consistent with the dictionary definition of "disposed." Defendant recognizes the three different uses of "disposed," but argues that it should be defined as "located."

For "chamber," Plaintiffs point out that Claims 1, 2, and 4

of the ‘295 Patent each state “a chamber located within said housing.” Claim 8 of the ‘295 Patent states “a substantially longitudinally arranged chamber disposed through a housing.” Claim 3 of the ‘923 Patent states “a single longitudinally disposed chamber.” The specifications of each patent recites “a housing (or body) 9 having a chamber 10 preferably formed longitudinally there through.” Thus, Plaintiffs argue, it follows that the chamber is “a longitudinally arranged area within a housing.” Although claim 8 of the ‘295 patent specifically states that the chamber is longitudinally arranged while claims 1, 2, and 4 of the ‘295 Patent do not recite this language, Plaintiffs argue it is appropriate to define “chamber” as longitudinally arranged because this is the only embodiment disclosed in the specification.

Defendant argues Plaintiffs’ construction is flawed not only because it omits the two purposes of the “chambers” in the claims, but it also incorrectly requires a “longitudinal” character. For Claim 8, which specifically requires a “longitudinally disposed chamber,” a “longitudinally disposed longitudinally arranged area” is a repetitive and confusing construction not fit for a jury. Additionally, Defendant argues that “area” implies two-dimensions, while “container” implies three dimensions and volume, which is apt here. Defendant proposes “a container of air or pneumatic assembly components”

because in the claims, the term “chamber” refers to either (1) the place that the pneumatic assembly is located, or (2) the place that air is held.

The claim terms “configured to be disposed in a closed position” and “a single longitudinally disposed chamber” follow from the construction of the terms “disposed” and “chamber.”

Defendant argues that because “disposed” and “closed position” refer to the location of the bolt in Claim 1, because “located” accurately reveals the meaning of the uncommon term “disposed” in this context and in light of the dictionary definition of “dispose” as related to objects, and because Plaintiff offers no construction, the term “configured to be disposed in a closed position” should be construed to mean “designed to be located, biased, or urged to a forward position.” Plaintiffs dispute that the term needs construction, and Defendant’s proposed construction should be rejected because it would needlessly add confusion and it arbitrarily substitutes words for those chosen by the patentee.

For “a single longitudinally disposed chamber,” Plaintiffs adopt the same construction as the one they propose for “chamber” - “a longitudinally arranged area within a housing.” Defendant also relies upon its construction of “chamber.” Defendant argues that because the single longitudinally disposed chamber is clearly not one of air, but of “component parts,” and

the component parts are “in-line,” they are therefore arranged in a series inside that container. Defendant argues that it is more accurate to state that the component parts are “located” (“disposed”) in a series (“in-line”), running lengthwise (“end to end”).

As always, the Court looks to the Patents for the context of the disputed term. Claims 1 through 7 of the ’295 Patent provide in relevant part:

> 1. An electro-pneumatic paintball gun comprising:
>
> a housing;
> a chamber located within said housing;
> a pneumatic assembly disposed within said chamber, said pneumatic assembly comprising a firing valve, a compressed gas storage area, and a bolt, wherein the bolt is configured to be disposed in a closed position before a launching sequence is initiated; and
> an electro-pneumatic valve configured to actuate the firing valve.

(Docket No. 1-1 at 10-11.)

Claim 8 is different and provides in relevant part:

> 8. An electro-pneumatic paintball gun comprising:
>
> a substantially longitudinally arranged chamber disposed through a housing of said paintball gun from a rearward end to a breech end;
> an in-line pneumatic assembly located within said chamber, said in-line pneumatic assembly comprising a firing valve, a compressed gas storage chamber, and a bolt assembly arranged together in a substantially contiguous assembly housing . . . .

(Id. at 11.)

Claim 3 of the ‘923 Patent states, “An in-line pneumatic

assembly according to claim 1, wherein the in-line pneumatic assembly is configured to be arranged in a single longitudinally disposed chamber of a paintball gun." The specifications of each patent recite "a housing (or body) 9 having a chamber 10 preferably formed longitudinally there through."

The Court finds that "disposed" means "arranged" because Plaintiffs adopt this proposed construction of "disposed" in the construction of the other terms using that word, and because in the context of the Patents, "arranged" is a more accurate construction than "located."

The Court rejects Plaintiffs' construction of "chamber" and their construction of "a single longitudinally disposed chamber" because those two terms cannot mean the same thing, and using a term to define itself is not helpful to the POSA. The Court also rejects Defendant's proposed construction as too narrow.

Considering the Court's construction of "housing" to mean "a body containing [certain components]," and that the chamber is within the housing, the Court finds "chamber" to mean "compartment."

Accordingly, the Court finds "configured to be disposed in a closed position" to mean "arranged in a closed position," and the Court finds "a single longitudinally disposed chamber" to mean "one longitudinally arranged compartment."

4. "First Surface Area," "Second Surface Area"

Claim Term	G.I. Sportz Construction	Valken Construction
"first surface area" '295 Pat.: 2, 4, 8 '923 Pat: 1	"a surface area of the [firing] valve that is smaller than a second surface area of the [firing] valve"	"smaller cross-sectional area of firing valve that receives constant supply of compressed gas, where the compressed gas holds the firing valve in closed position"

Claim Term	G.I. Sportz Construction	Valken Construction
"second surface area" '295 Pat.: 2, 4, 8 '923 Pat.: 1	"a surface area of the [firing] valve that is larger than the first surface area of the [firing] valve"	"larger cross-sectional area of firing valve that receives selective supply of gas to actuate firing valve due to trigger"

Court's construction: plain and ordinary meaning

Plaintiffs argue that their construction of the terms are supported by the claims and the specifications. Plaintiffs contend that Defendant's construction is ambiguous and improperly adds superfluous language.

Defendant argues that because there is no difference in the "first surface area" term between the two Patents, and because both are clearly taught to have smaller cross-sectional areas for specific application of opposing pneumatic forces, one of ordinary skill would agree that a factfinder would properly understand the "first surface area" as being a "smaller cross-sectional area of firing valve that receives constant supply of

compressed gas, where the compressed gas holds the firing valve in closed position." Defendant further argues that one of ordinary skill would agree that a factfinder would properly understand the term "second surface area" in the relevant claims to not only have a larger cross-sectional area than the opposing first surface area, but to be what actuates the firing of the projectile. Accordingly, "second surface area" should be construed as "larger cross-sectional area of firing valve that receives selective supply of gas to actuate firing valve due to trigger."

The terms "first surface area" and "second surface area" are included in Claims 2, 4 and 8 in the '295 Patent and in Claim 1 in the '923 Patent.

Claim 2 provides in relevant part:

> 2. An electro-pneumatic paintball gun comprising: . . .
>
> an electro-pneumatic valve configured to actuate the firing valve, wherein the firing valve is configured to be actuated by selectively supplying compressed gas to a second surface area, said second surface area being larger than an opposing first surface area, wherein the first surface area receives a constant supply of compressed gas.

(Docket No. 1-1 at 10.)

Claim 4 provides in relevant part:

> 4. An electro-pneumatic paintball gun comprising: . . .
>
> an electro-pneumatic valve configured to actuate the firing valve, wherein the firing valve is configured having a second surface area larger than a first surface area, wherein the first surface area is configured to

continuously receive a supply of compressed gas while the gun is pressurized, and wherein said second surface area is configured to selectively receive a supply of com- pressed gas from the electro-pneumatic valve to operate the firing valve by overcoming a force created by the compressed gas on the first surface area.

(Id. at 10.)

Claim 8 provides in relevant part:

8. An electro-pneumatic paintball gun comprising: . . .

an electro-pneumatic valve configured to actuate the firing valve, wherein said firing valve comprises a first sur- face area and a second surface area, wherein said first surface area is smaller than the second surface area, and wherein said electro-pneumatic valve is configured to selectively supply compressed gas to the second surface area to actuate the firing valve.

(Id. at 11.)

Claim 1 of the ’923 Patent provides:

1. An in-line pneumatic assembly for a paintball gun, comprising:

a gas storage area configured to receive compressed gas from a regulated gas supply;

a valve comprising a first surface area and a second surface area, wherein the first surface area is smaller than the second surface area, wherein the first surface area is configured to receive a substantially constant supply of compressed gas, and wherein the second surface area is configured to selectively receive compressed gas of the same pressure to actuate the valve; and
a bolt configured to slide between a forward and a rearward position and to transmit compressed gas from the compressed gas storage area when the valve is actuated.

(Docket No. 1-2 at 10.)

The “Summary of the Invention” in both Patents provides in relevant part:

> According to one aspect of this invention, an in-line pneumatic assembly includes a gas storage area, a valve, and a bolt. The gas storage area receives compressed gas from a regulated gas supply through a port in the valve. The valve includes two surfaces of different cross-sectional areas. A first surface, having a smaller cross-sectional area, receives a substantially constant supply of compressed gas. A second surface, having a larger cross-sectional area, selectively receives compressed gas to actuate the valve. The bolt is configured to slide back and forth between a forward and a rearward position. The bolt is preferably arranged in a forward (closed) position before the valve is actuated to fire the gun. When the valve is actuated, compressed gas from the compressed gas storage area is directed through the bolt and a paintball is launched from the gun.

(Docket No. 1-1 at 8; see also Docket No. 1-2 at 8.)

The two Patents’ specifications further explain:

> A valve actuator 18 is located within the valve retainer 14. The valve actuator 18 includes a forward surface 18a having a second surface area that is larger than the first surface area of the valve 16. The second surface area is selectively subjected to compressed gas from a control valve through a port in the valve retainer 14 to actuate the valve 16. The compressed gas supplied to the second surface area prefer-ably has the same pressure as the gas supplied to the first surface area. Because of the difference in cross-sectional areas, however, the force exerted on the second surface area is greater than the force exerted on the first surface area, thereby actuating the valve 16. When actuated, the valve 16 is forced rearward, causing the plug 16c to become unseated from the releasing port 21a of the compressed gas storage area 20. The gas stored in the compressed gas storage area 20 is thereby released into and through the bolt 24.

(Docket No. 1-1 at 9; Docket No. 1-2 at 9.)

A cross-sectional drawing of the invention shows the

following, with the red representing the first surface area at 16a, 16b, and blue representing the second surface area at 18a.

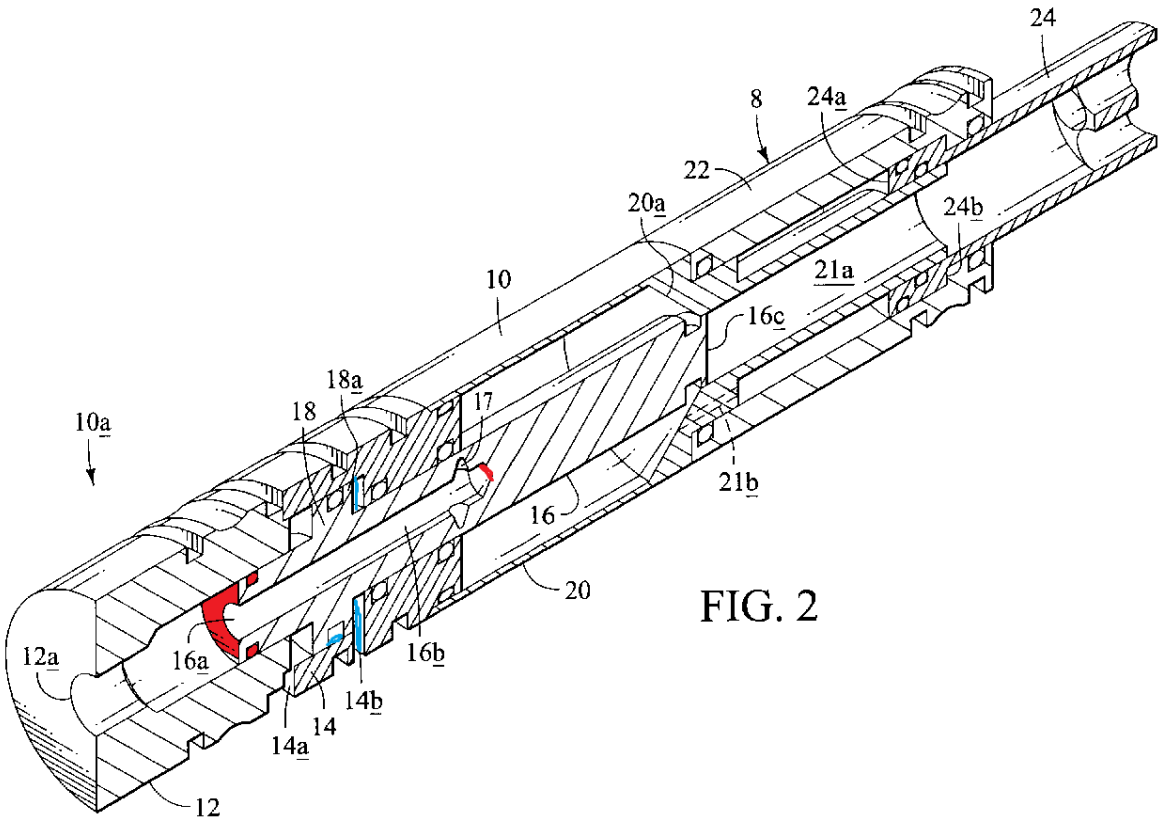


FIG. 2

The Court finds based on the claims, summary of the invention, specifications, and drawings that Defendant's construction of "first surface area" and "second surface area"

includes descriptions of the purpose of the "first surface area" and "second surface area" that are either redundant of the claims or may be in conflict with the claims.

The Court finds that the meaning of "first surface area" and "second surface area" are plainly explained by the claims, which describe the location, size, and purpose of those valve surface areas. Therefore, the Court finds that those terms shall be construed by their plain and ordinary meaning.

5. "Overcoming a force created by the compressed gas on the first surface area"

Claim Term	G.I. Sportz Construction	Valken Construction
"overcoming a force created by the compressed gas on the first surface area" '295 Pat.: claim 4	Plain and ordinary meaning	"application of air pressure that exceeds constant air pressure forces that place a firing valve in a closed position"

Court's construction:

Claim 4 provides in relevant part:

4. An electro-pneumatic paintball gun comprising:
a housing;

a chamber located within said housing;

a pneumatic assembly disposed within said chamber, said pneumatic assembly comprising a firing valve, a compressed gas storage area, and a bolt; and

an electro-pneumatic valve configured to actuate the firing valve, wherein the firing valve is configured having a second surface area larger than a first surface area,

> wherein the first surface area is configured to continuously receive a supply of compressed gas while the gun is pressurized, and wherein said second surface area is configured to selectively receive a supply of compressed gas from the electro-pneumatic valve to operate the firing valve by overcoming a force created by the compressed gas on the first surface area.

(Docket No. 1-1 at 10.)

Plaintiffs argue that Defendant's construction of this term is contrary to the language of Claim 4, which recites nothing about "constant air pressure forces that place a firing valve in a closed position." Plaintiffs argue that Defendant's proposed construction of this term is an attempt to rewrite the claim in a manner to argue that it does not infringe, which is improper. Defendant conclusorily states "overcoming a force created by the compressed gas on the first surface area" means an "application of air pressure that exceeds constant air pressure forces that place a firing valve in a closed position" without any further explanation, and points out that Plaintiffs have not provided any alternative construction for Defendant to consider.

The Court finds that just like the terms "first surface area" and "second surface area," when the term "overcoming a force created by the compressed gas on the first surface area" is read in the context of the claim, the plain and ordinary meaning of that phrase speaks for itself. Consequently, the Court finds that the plain and ordinary meaning shall apply to "overcoming a force created by the compressed gas on the first

surface area."

6. "Configured to continuously receive," "Configured to continuously be exposed to compressed gas," "Configured to selectively receive"

Claim Term	G.I. Sportz Construction	Valken Construction
"configured to continuously receive" '295 Pat.: claim 4	Plain and ordinary meaning	"designed for air to force a surface area"

Claim Term	G.I. Sportz Construction	Valken Construction
"configured to continuously be exposed to compressed gas" '295 Pat.: claim 9	Plain and ordinary meaning	"designed to receive constant air pressure that holds firing valve in closed position until acted on by an opposing force of compressed gas"

Claim Term	G.I. Sportz Construction	Valken Construction
"configured to selectively receive" '295 Pat.: claim 4 '923 Pat.: claim 1	Plain and ordinary meaning	"designed to receive selective application of air on surface area"

Court's construction: plain and ordinary meaning

Claim 4 and Claim 9 provide in relevant part:

4. An electro-pneumatic paintball gun comprising:
a housing;

a chamber located within said housing;

a pneumatic assembly disposed within said chamber, said pneumatic assembly comprising a firing valve, a com-

pressed gas storage area, and a bolt; and

an electro-pneumatic valve configured to actuate the firing valve, wherein the firing valve is configured having a second surface area larger than a first surface area, wherein the first surface area is configured to continuously receive a supply of compressed gas while the gun is pressurized, and wherein said second surface area is configured to selectively receive a supply of compressed gas from the electro-pneumatic valve to operate the firing valve by overcoming a force created by the compressed gas on the first surface area.

(Docket No. 1-1 at 10.)

9. An electro-pneumatic paintball gun according to claim 8, wherein said first surface area is configured to continuously be exposed to compressed gas while the paintball gun is pressurized.

(Id. at 11.)

Claim 1 of the '923 Patent provides in relevant part:

1. An in-line pneumatic assembly for a paintball gun, comprising:

a gas storage area configured to receive compressed gas from a regulated gas supply . . . .

(Docket No. 1-2 at 10.)

Plaintiffs advocate for the plain and ordinary meaning of these terms, while Defendant's proposed construction of these terms endeavors to add the purpose for the mechanism into the term. The Court finds that these terms do not require additional interpretation beyond their plain and ordinary meaning.

III. CONCLUSION

As indicated by the Court's June 28, 2019 Order (Docket No. 84), the parties are permitted to proceed as appropriate in light of the Court's foregoing claim construction.

Date: June 30, 2019
At Camden, New Jersey

s/ Noel L. Hillman
NOEL L. HILLMAN, U.S.D.J.